the motion of the heavenly bodies. Hence, just as Alchemy and the search for the Philosopher's Stone did a good deal to advance Chemistry, so (but to an even greater degree) Astrology was the basis of the modern science of Astronomy. Above all, the instruments upon which astronomical study is based are a heritage from the mediaeval observers. The Alfonsine Tables drawn up by two Toledo Jewish savants *(supra* pp. 67-8) form the basic document of all scientific astronomy.

Mention has been made above of the improved astronomical instruments which are due to Levi ben Gershom of Bagnols, and of the Tables drawn up by Abraham Zacuto of Salamanca, which were of incalculable importance for the maritime discoveries at the close of the Middle Ages. These instances may be multiplied.[1] The names of no less than 252 Jewish astronomers who flourished, mainly in Europe, before the year 1500 have been enumerated—a remarkable figure, rivalled by very few European peoples during that period.[2]

This interest did not end with the Middle Ages. It is known that Galileo was on friendly terms with the Marrano poet, Immanuel Boccaro Frances, and that Tycho Brahe knew the Hebrew chronicler, David Ganz of Prague. It is probable, too, that Sir William Herschel, the greatest of astronomers, was of Jewish birth; for the name is typically Jewish, and he came over to England from Germany as a musician in a Hanoverian band. Benjamin Gompertz, who has been mentioned above,

began the construction of tables for the mean places of fixed stars, but was anticipated by Bessel.

*It may be added that the earliest literary reference to a sun-clock occurs in II Kings xx. 9-11, in connexion with the illness of King Hezekiah of Judah.

[2] One interesting figure was the convert Pierre de Notre-Dame, physician to King Rene of Anjou, and grandfather of the famous Nostradamus.